

Department of Atmospheric Sciences

COURSE ANNOUNCEMENT – SEMESTER I – 2002–03

ATMOS 120/Sec. C: Severe and Unusual Weather

Call number: 00928

Instructor: Prof. John Walsh, 204 Atmos. Sci. Bldg., 333-7521

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Room and Time: 314 Altgeld; 8:30–9:45 a.m. Tu Th

Credit: 3 hours

Prerequisites: None

Most extreme manifestations of weather and climate are analyzed in terms of their physical basis and their historical, economic and human consequences. Emphasis is placed on the interplay between technological advances, the evolution of meteorology as a science and the impacts of extreme weather (winter storms, floods, severe thunderstorms, hurricanes, tornadoes). Technological advances include satellites, weather radars, and computer models used for weather prediction. Daily weather discussions will track severe weather events occurring during the course.

Course Content:

1. Properties of the atmosphere
2. ASOS, satellites, Doppler radars, profilers, and computer models
3. Hurricanes – impending coastal disasters
4. Severe thunderstorms, tornadoes, lightning, downbursts, floods
5. Mid-latitude cyclone development
6. Winter weather: blizzards, lake effect snow, ice storms, cold wave outbreaks

Text: Class notes will be available at bookstores.

*This course is approved for General Education credit in the category of
Natural Sciences and Technology: Physical Science*